

Title (en)

COATING COMPOSITION FOR THERMOPLASTIC RESIN PARTICLES FOR FORMING FOAM CONTAINERS

Title (de)

BESCHICHTUNGSZUSAMMENSETZUNG FÜR THERMOPLASTISCHE HARZTEILCHEN ZUR HERSTELLUNG VON SCHAMSTOFFBEHÄLTERN

Title (fr)

COMPOSITION DE REVETEMENT POUR PARTICULES DE RESINE THERMOPLASTIQUE EN VUE DE LA FORMATION DE CONTENEUR DE MOUSSE

Publication

**EP 1590172 A4 20060329 (EN)**

Application

**EP 04707167 A 20040131**

Priority

- US 2004002926 W 20040131
- US 44489703 P 20030204

Abstract (en)

[origin: WO2004069901A2] Expandable or pre-expanded thermoplastic particles, e.g. polystyrene particles, used to form foam containers e.g. cups, bowls, are coated with a coating composition comprising a liquid part consisting of a) liquid polyethylene glycol with an average molecular weight of 200 to 800; and a solid part comprising components selected from the group consisting of b) polyolefin wax, e.g. polyethylene wax, c) a metal salt of higher fatty acids, e.g. zinc stearate or calcium stearate; d) polyethylene glycol with an average molecular weight of 900 to 10,000; and e) a fatty bisamide or fatty amide, e.g. ethylene bis-stearamide; and combinations of b) through e). The coating composition prevents or resists leakage of liquids and foods with oil and/or fatty components and improves the rim strength and ATF properties of foam containers.

IPC 1-7

**B32B 5/16; C09D 201/08; C08L 91/06; C08L 93/00**

IPC 8 full level

**B32B 5/16** (2006.01); **C08J 3/12** (2006.01); **C08J 7/04** (2006.01); **C08J 9/224** (2006.01); **C08L 1/00** (2006.01); **C08L 91/06** (2006.01);  
**C08L 93/00** (2006.01); **C09D 201/08** (2006.01)

IPC 8 main group level

**C08J** (2006.01)

CPC (source: EP KR US)

**C08J 3/128** (2013.01 - KR); **C08J 7/0427** (2020.01 - EP US); **C08J 9/224** (2013.01 - EP KR US); **C08J 2325/02** (2013.01 - EP KR US);  
**C08J 2423/00** (2013.01 - EP KR US); **C08J 2471/00** (2013.01 - EP KR US); **C08J 2491/00** (2013.01 - EP KR US);  
**Y10T 428/2982** (2015.01 - EP US); **Y10T 428/2991** (2015.01 - EP US); **Y10T 428/2998** (2015.01 - EP US)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2004069901A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2004069901 A2 20040819; WO 2004069901 A3 20050512**; AU 2004209027 A1 20040819; AU 2004209027 B2 20090611;  
BR PI0407204 A 20060124; BR PI0407204 B1 20140909; BR PI0407204 B8 20220802; CA 2514285 A1 20040819; CA 2514285 C 20130108;  
CN 1331659 C 20070815; CN 1756652 A 20060405; EP 1590172 A2 20051102; EP 1590172 A4 20060329; JP 2006518795 A 20060817;  
JP 4833829 B2 20111207; KR 20050105997 A 20051108; MX PA05008176 A 20051005; RU 2005127594 A 20060127;  
RU 2328510 C2 20080710; US 2004220303 A1 20041104; US 2006252867 A1 20061109; US 2010213631 A1 20100826;  
US 2010308486 A1 20101209; US 2011109004 A1 20110512; US 7294655 B2 20071113; US 7736740 B2 20100615; US 7785711 B1 20100831;  
US 7892645 B2 20110222; US 7972695 B2 20110705

DOCDB simple family (application)

**US 2004002926 W 20040131**; AU 2004209027 A 20040131; BR PI0407204 A 20040131; CA 2514285 A 20040131;  
CN 200480005590 A 20040131; EP 04707167 A 20040131; JP 2006503252 A 20040131; KR 20057014285 A 20050803;  
MX PA05008176 A 20040131; RU 2005127594 A 20040131; US 201113004062 A 20110111; US 48059106 A 20060703;  
US 76934904 A 20040131; US 76971610 A 20100429; US 85951910 A 20100819